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# The Impacts of Perceived Market Orientation in Higher Education: Student as a Customer

Ceyda TANRIKULU<sup>1</sup>, Levent GELIBOLU<sup>2</sup>

## Abstract

The purpose of this research was to determine whether perceived market orientation and its dimensions have any impact on satisfaction and perceived brand equity. It had also a specific purpose to determine whether satisfaction had a mediating effect in the relationships between a) perceived market orientation and perceived brand equity and b) dimensions of perceived market orientation and perceived brand equity. Convenience sampling method was used and data were collected through questionnaires filled out by students on their own. Regression and mediation analysis were used to test the hypotheses. The findings suggested that perceived market orientation and its dimensions affected both perceived brand equity and the satisfaction. They also clearly showed that satisfaction played fundamental roles in perception of market orientation and brand equity by students. The major contributions of this study for literature and practitioners were filling the gap in determining the impacts of perceptions of students, as customers, about the market orientation and brand equity of universities and also providing a better explanation on these impacts in the literature. The findings were discussed, and suggestions were provided for theory and administration.

*Keywords:* perceived market orientation, perceived brand equity, satisfaction, student as a customer, higher education.

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## Introduction

Strong and dynamic changes intensify competition in higher education (HE). Opportunities provided by national and international dynamism, increasing interest in alternative education options like private universities and vocational education and availability of distance education programs make market-oriented approach a requirement for universities (Flavian & Lozano, 2007; Casidy, 2014).

Concentration of competition in HE makes more and more HE organizations customer-oriented (Casidy, 2014). Moreover, universities in this intensive competitive environment have a tendency to globalization and branding as a response to problems in the country. Considering students as a primary stakeholder and customer is another tendency in the HE, which has revealed itself after the global decrease in differentiation in education (Sharma, Rao & Popli, 2013). Therefore, it is understood that satisfaction of students, as customers, has a critical role. Considering the competition, universities should determine what is important for students, prove them that they make every effort to provide these important things and keep its promises to satisfy the students (Elliott & Healy, 2001). Hence, students have a key role in market orientation (MO) and branding processes. MO and brand equity (BE) perceived by students is significant for universities to cope with changes and gain a strong position in HE. These perceptions of students involve considerably important information and motivations that will help universities develop successful strategies. Despite its increasing importance, number of researches that analyze MO from the perspective of customers is limited in the literature (Mulyanegra, 2010; Casidy, 2014) Therefore, number of researches that analyze MO on the basis of customers' perspective, or more specifically from the perspective of students as customers is also limited. This is also prevalent for BE (Mourad, Ennew & Kortam, 2011; Sharma *et al.*, 2013).

Considering specified considerations and gaps in the literature, two primary purposes were adopted for this study. The first purpose was to determine whether perceived market orientation (PMO) and its dimensions have any impact on satisfaction and perceived brand equity (PBE). Furthermore, use of a mediation variable, which is supposed to have a significant role for social sciences and behavioral sciences, to clarify the causality of relationships between variables (MacKinnon, 2001) and why and how this relationship is created (MacKinnon, 2008) is important for obtaining detailed and accurate findings. Thus, the second purpose was to determine whether satisfaction has a mediating effect in the relationships between a) PMO and PBE and b) dimensions of PMO and PBE. The study was particularly expected to make a contribution to filling the gap in determining the impacts of perceptions of students, as customers, about the MO and BE of universities and also providing a better explanation on these impacts in the literature. It could also be helpful to contribute to the understanding about PMO, student satisfaction and BE perceived by the students and provides cues in

making strategic decisions. In the first section of the study, the theoretical infrastructure and hypotheses were discussed. Following this, sections of methodology, findings, discussion and conclusion were respectively presented.

## Literature and Hypotheses

### *Perceived Market Orientation (PMO)*

MO is accepted as a basis for both marketing and strategically management (Greenley, 1995) and a criterion that indicates whether the concept of marketing is applied successfully (Deshpande & Farley, 2004). There are academicians that adopt a customer-oriented approach for MO. PMO reflects the attitude of customers towards market-oriented activities and behaviors of an organization. Having carried out significant researches on MO, Deshpande and Farley (1998) described MO as a group of processes and activities among functions of gaining and satisfying customers by constant evaluation on needs. Deshpande, Farley and Webster Jr (1993) valued customers' needs and demands above all. Steinman, Deshpande and Farley (2000) suggested that the appropriate level for MO would be as much as deemed necessary by customers. It is seen that there is a limited number of studies that analyze MO in HE (Siu & Wilson, 1998; Wasmer & Bruner II, 1999; Voon, 2006; Torlak, 2006; Flavian & Lozano, 2007; Voon, 2007; Helgesen, 2008; Casidy, 2014). Torlak (2006) considers that universities are institutions that have the capability to use science as an instrument and provide solutions for social problems and states that universities should generally take notice of the needs and expectations of the society as the target group. This requires MO. It is claimed that a university that adopts MO will have a detailed information about all customers' (students, companies, society, ...) needs and demands and about its competitors as a requirement of MO and thus will provide superior assets for its customers and increase its competitive power (Flavian & Lozano, 2007).

Voon (2006) is the first to discuss PMO in HE from the perspective of students. Voon considers HE as a service and turns his viewpoint to the customers, namely the students, as a requirement of the concept of service. He suggests service-driven MO for HE. Voon (2007) defines this concept as "*the set of beliefs, behaviors, and cross-functional processes that seriously focus on continuous and comprehensive understanding, disseminating, as well as satisfying the current and future needs of the target customers for service excellence*". The author also developed a scale named SERVMO that consists of six dimensions, to measure the perceptions of HE students about MO. These dimensions are (Voon, 2006; Voon, 2007): (1) *Customer Orientation*: Customer is accepted as the heart of the concept of market and the primary element of MO. It provides a considerable

insight to understand target customers and meet their needs and thus gives the opportunity of creating a superior and continuous customer value. Organizations with high performance are closer to their customers; (2) *Competitive Orientation*: It is required to understand and manage competition. Market-oriented organizations have a great understanding of their current and future competitors in the market they serve for; (3) *Cross-Functional Orientation*: All units of the organizations should serve for the market and put emphasis on organizational culture and service quality; (4) *Long-Term Orientation*: Providing a long-term direction for the organization is seen as a primary element in the beginning of the concept of marketing. Providing forwardlooking and future-oriented services to the target market is really important by virtue of the social responsibility to produce good, dynamic and skilled graduates in the HE; (5) *Performance Orientation*: For excellent service, different functions with their own performance-oriented targets in frame of the organizational mission are required to collect information about the performance or measure, disseminate and respond to such information; (6) *Personnel Orientation*: In companies willing to fulfill market requirements continuously or meet customers' demands and needs, employees play a significant role. This is more prevalent in organizations, where employees and customers are in contact, like universities.

### ***Brand Equity (BE)***

BE, which is considered to be important in the creation of powerful brands (Godeswar, 2008) was defined by Yoo and Donthu (2001) as responses of consumers about the difference between branded and non-branded products with same properties and marketing stimuli and conceptualized in three dimensions, which are brand attachment, perceived quality and brand awareness/association. Keller (1993) defines customer-based BE as "*the differential effect of brand knowledge on consumer response to the marketing of the brand*". It is realized when customer is familiar to the brand and has certain nice, strong and unique brand associations in his mind. It indicates consumers' preference of or attitude towards a brand (Chen, 2010) and may be considered as the extent of costumers' attachment to a brand and/or the definition of customers' associations and beliefs regarding a brand (Wood, 2000). MO is accepted as an important factor for the continuous and proactive adjustment of brand position. It is considered that MO may enable proactive performance of brand positioning and marketing programs and thus increase BE (Takimova & Beverland, 2005). It is argued that increase in MO will enhance quality in HE (Voon, 2006). Flavian and Lozano (2007) claim that a market-oriented university will provide its customers with superior values and increase its competitive power. As customers are taken as the key element for MO (Voon, 2006; Voon, 2007), students, as the customers of universities, will also be the key element. Activities required by MO such as fulfilling students' needs and demands with a longstanding perspective and contribution of both

academic and administrative personnel to such fulfillment and providing different and superior services with a consideration to competitors will increase the attachment of students, make them perceive their university with a higher quality and bring the university to a better position in their minds when compared to competing universities. Therefore, MO perceived by students and its dimensions may be expected to influence BE perceived by students. Thus;

H1: PMO will have a positive effect on the PBE.

H2: Each dimension of PMO will have a positive effect on the PBE.

### ***Satisfaction***

Satisfaction is defined by Oliver (1997) “is the consumer’s fulfillment response. It is a judgment that a product or services feature, or the product or service itself, provided (or providing) a pleasurable level of consumption-related fulfillment, including levels of under or overfulfillment”. As to HE, student satisfaction is defined as a short-term attitude arising from a student’s evaluation on education experiences. Students become satisfied when the realized performance meet or go beyond their expectations (Elliott & Healy, 2001). Voon (2006, 2007) emphasizes that a market-oriented organization is required to carry out its activities in a way to satisfy its customers. In HE, it is determined that PMO has a positive impact on satisfaction (Casidy, 2014; Voon, 2006). More specifically, dimensions of PMO have a positive relationship with satisfaction (Voon, 2007). Students will be pleased when a university makes effort to provide them with superior and continuous values, offer more than its competitors and adopt market-oriented practices with a long-term perspective. Perception of market-oriented activities based on long-term customer satisfaction by students, as customers, will pave the way for students’ satisfaction. Therefore;

H3: PMO will have a positive effect on satisfaction.

H4: Each dimension of PMO will have a positive effect on satisfaction.

Many studies reveal the positive relationship between satisfaction and BE (Pappu & Quester, 2006; Chen, 2010). Moreover, it is determined that BE is highly dependent on customers’ satisfaction (Torres & Tribo, 2011). Thus, when consumers are satisfied with brand, it is expected that strong and desired associations are formed in their minds (Pappu & Quester, 2006). Voon (2006) determined the impact of quality, which is a component of BE, on customer satisfaction. However, there is no study in the literature that analyzes impact of student satisfaction on the PBE in HE. In accordance with the marketing literature; attachment, quality perception and positive strong associations, which are components of BE, are expected to occur when students, as customers, are satisfied. Therefore;

H5: Satisfaction will have a positive effect on the PBE.

Considering the fact that mediation is observed when independent variable leads to mediation variable and mediation variable leads to dependent variable (MacKinnon, Warsi & Dwyer, 1995), it may be assumed that satisfaction will mediate the relationship between PMO and PBE. Previous studies show that PMO influences satisfaction (Casidy, 2014; Voon, 2006:) and satisfaction influences BE (Torres & Tribo, 2011). When dimensions of PMO are individually analyzed, they are found to be related to satisfaction (Voon, 2007). Considering these, it is assumed in this study that students' perceptions of MO will generate satisfaction and satisfaction will lead to PBE. In other words, students who perceive their universities as market-oriented will be satisfied with their universities and a perception of BE will be developed. Therefore, it is expected that PMO and its dimensions will have an indirect influence on PBE through the influence of satisfaction. By accepting satisfaction as a mediation variable, explanations regarding why and how the mentioned relationships occur will be more accurate. Thus:

H6: Satisfaction will mediate the relationship between PMO and PBE.

H7: Satisfaction will mediate the relationship between dimensions of PMO and PBE.

## **Methodology**

### ***Sample***

Population of this study was composed of students having undergraduate education in a university located in Eastern Anatolia Region in Turkey. Convenience sampling method was used and data was collected through questionnaires filled out by students on their own. Students were asked to fill out the questionnaire on their own to ensure that they express their opinions freely and accurately. 400 questionnaires were distributed to students and, out of them, 375 were returned and 368 were found convenient for the analysis. Table 1 gives the demographic characteristics of participants. 47.8% of participants were female and single participants (97%) were dominant. A large part of participants (49.5%) were in the age range of 20-22 and participants having an income of TL 201-400 had the biggest share within income groups (45.6%).

Table 1. *Demographic Characteristics of Participants*

Variables	n	%	Variables	n	%
<b>Gender</b>			<b>Marital Status</b>		
Woman	176	47.8	Married	11	3.0
Man	192	52.2	Single	357	97.0
<b>Age (year)</b>			<b>Personal Monthly Income (TL)</b>		
17-19	75	20.4	200 and less	44	12.0
20-22	182	49.5	201-400	168	45.6
23-25	97	26.3	401-600	83	22.6
26 and more	14	3.8	601-800	39	10.6
			<i>more than 800</i>	34	9.2

### **Questionnaire and Scale**

Questionnaire consisted of two sections: 43 statements and 4 questions in total. The first section included statements regarding research variables and the second section included questions aiming to determine demographical characteristics of participants. Scales used in the previous studies in HE were taken into account in using scales, so SERVMO scale developed by Voon (2006) was used to measure PMO and scale of Yoo and Donthu (2001) was used to measure PBE, in compliance with the previous studies (Casidy, 2014 for PMO; Mourad *et al.*, 2011 for BE). Casidy (2014) was utilized for the scale used for measuring satisfaction.

Casidy (2014) analyzed personnel orientation in terms of academic and administrative personnel and evaluated them as different dimensions in measuring PMO. The author also discussed performance orientation and customer orientation under the same dimension. As it is a contemporary study, this approach was adopted in this study. Accordingly, perceived customer/performance orientation, perceived long-term orientation, perceived competitive orientation, perceived academic personnel orientation, perceived administrative personnel orientation and perceived cross-functional coordination orientation were analyzed as dimensions of PMO. A 7-point Likert attitude scale was used in determining whether participants agree with the statements in the questionnaire. In the scales, “7 means strongly agree; 4 means neither agree nor disagree; 1 means strongly disagree”.

Before getting to the stage of face-to-face questionnaire application, a preliminary test was conducted with 30 students selected by convenience sampling method to determine the clarity of statements in the questionnaire and possible misunderstandings. Following the corrections made after this test, the questionnaire was brought to its final form. Questionnaires were filled out by 5 postgraduate students and it takes 10 minutes to answer each questionnaire.



### ***Measure validation and descriptive statistics***

Cronbach  $\alpha$  coefficients were calculated to determine the reliability of scales used in the study. It was seen in Table 2 that  $\alpha$  coefficients exceed 0.70 (Hair, Anderson, Tahtam & Black, 1998), which is required for a scale to be reliable. Averages of research variables were found to be between 2.909 and 3.380. It was determined that participants had a low perception of BE and MO (generally) about their university and a low level of satisfaction. Table 2 contains correlation coefficients between variables.

### ***Data Analysis***

SPSS (16) software was used in all statistical analyses performed for data analysis. A simple linear regression analysis and a 4-step mediation analysis including a regression analysis suggested by Baron and Kenny (1986) were used to test the hypotheses. The authors suggest that a variable may be a mediation variable on three conditions: a) change in the independent variable will significantly lead to a change in the variable which is accepted as an mediation variable, b) change in the mediation variable will significantly lead to a change in the dependent variable and c) impact of independent variable on the dependent variable will disappear or decrease upon the inclusion of the mediation variable as an independent variable. If impact of the independent variable on the dependent variable becomes insignificant when the intervening variable is included in the analysis, it is accepted to be “full mediator”; if impact of the independent variable on the dependent variable is significant, but decreases, it is accepted to be “partial mediator”. Furthermore, Baron and Kenny’s methods for analyzing mediation, Sobel test (1982), which is one of the required tests to assess the significance of the mediation effect was applied.

## **Analysis Results**

Results of regression analyses given in Table 3 showed that PMO ( $\beta=0.490$   $p<0.01$  in Model 1) and its dimensions had an impact on the PBE. Therefore, H1 and H2 were accepted. As seen in the table, PBE was influenced by customer/performance orientation ( $\beta=0.452$   $p<0.01$  in Model 2), long-term orientation ( $\beta=0.371$   $p<0.01$  in Model 3), competitor orientation ( $\beta=0.391$   $p<0.01$  in Model 4), academic personnel orientation ( $\beta=0.282$   $p<0.01$  in Model 5), administrative personnel orientation ( $\beta=0.262$   $p<0.01$  in Model 6) and cross-functional coordination orientation ( $\beta=0.265$   $p<0.01$  in Model 7). Each of these impacts was positive and direct impacts.

Table 2. Reliability and Descriptive Statistics of Research Variables

Variables	Item	Avg.	St.Dv.	$\alpha$	PMO	CPO	LTO	CO	APO	AdPO	CFO	Sat.	BE
PMO	28	3.103	1.414	0.958	1	.811**	.853**	.841**	.834**	.863**	.752**	.553**	.577**
CPO	8	2.909	1.600	0.916	.811**	1	.742**	.664**	.567**	.586**	.504**	.489**	.603**
LTO	5	3.324	1.739	0.889	.853**	.742**	1	.696**	.641**	.635**	.529**	.476**	.538**
CO	4	3.034	1.712	0.865	.841**	.664**	.696**	1	.624**	.661**	.523**	.485**	.558**
APO	4	3.298	1.756	0.863	.834**	.567**	.641**	.624**	1	.748**	.552**	.441**	.413**
AdPO	4	3.088	1.792	0.896	.863**	.586**	.635**	.661**	.748**	1	.632**	.441**	.392**
CFO	3	3.006	1.696	0.852	.752**	.504**	.529**	.523**	.552**	.632**	1	.442**	.375**
Sat	4	3.380	1.725	0.777	.553**	.489**	.476**	.485**	.441**	.441**	.442**	1	.495**
BE	11	3.294	1.199	0.781	.577**	.603**	.538**	.558**	.413**	.392**	.375**	.495**	1

\*\* Correlation is significant at the 0.01 level (two-tailed).

PMO: Perceived Market Orientation, CPO: Customer/Performance Orientation, LTO: Long Term Orientation, CO: Competitive Orientation, APO: Academic Personal Orientation, AdPO: Staff Orientation, CFO: Crossfunctional orientation , Sat.: Satisfaction, BE: Brand Equity

Moreover, PMO ( $\beta=0.672$   $p<0.01$  in Model 8) and its dimensions had a statistically significant impact on satisfaction. Thus, H3 and H4 were accepted. Accordingly, satisfaction was positively influenced by customer/performance orientation ( $\beta=0.527$   $p<0.01$  in Model 9), long-term orientation ( $\beta=0.473$   $p<0.01$  in Model 10), competitor orientation ( $\beta=0.487$   $p<0.01$  in Model 11), academic personnel orientation ( $\beta=0.434$   $p<0.01$  in Model 12), administrative personnel orientation ( $\beta=0.424$   $p<0.01$  in Model 13) and cross-functional coordination orientation ( $\beta=0.487$   $p<0.01$  in Model 14). Furthermore, it was determined that satisfaction had a statistically significant impact on PBE ( $\beta=0.344$   $p<0.01$  in Model 15) and therefore H5 was supported.

Table 4 included the results of 4-step regression analysis for mediation analysis

H6: In the step 1 and 2, it was seen that PMO (independent variable) had a statistically significant impact on satisfaction (mediation variable) and satisfaction (mediation variable) had a statistically significant impact on PBE (dependent variable). Thus, previously specified conditions *a* and *b* (section 3.3), which are required for a variable to be a mediating variable, were fulfilled. Regression analyses, which were performed in the step 3 and 4 to determine whether the condition *c* is fulfilled or not, show that this condition was also fulfilled. While  $\beta$  of PMO was 0.49 and  $p<0.01$  (step 3),  $\beta$  decreases to 0.371 ( $p<0.01$ ) upon the inclusion of satisfaction as a mediation variable. Thus, satisfaction was a mediator in the relationship between PMO and PBE. As this impact did not completely disappear but decreased, it could be claimed that satisfaction was a partial mediator.

H7: In step 1 and 2, any change in each dimension of PMO (independent variable) lead to a statistically significant change in satisfaction (mediation variable) and any change in satisfaction (mediation variable) lead to a statistically significant change in PBE (dependent variable). Thus, it was determined that conditions *a* and *b* are fulfilled. It was understood from the regression analyses in step 3 and 4 that condition *c* was also fulfilled. Therefore, it was seen that, upon the inclusion of satisfaction as a mediation variable, impact of each dimension of PMO on PBE was maintained, but decreased. Accordingly,  $\beta$  of customer/performance orientation decreased from 0.452 to 0.356,  $\beta$  of long term orientation from 0.371 to 0.269,  $\beta$  of perceived competitor orientation from 0.391 to 0.291,  $\beta$  of perceived academic personnel orientation from 0.282 to 0.165,  $\beta$  of perceived administrative personnel orientation from 0.262 to 0.144 and  $\beta$  of perceived cross-functional coordination orientation from 0.265 to 0.137. It was understood that satisfaction was a partial mediator, as impact of the dimensions of PMO was maintained (but decreased).

Table 3. Results of linear regression analysis

					$\beta$	Se	p						$\beta$	Se	p	
Model 1									Model 8							
R <sup>2</sup> = 0.333	Constant	1.772	0.124	0.000				R <sup>2</sup> = 0.306	Constant	1.285	0.181	0.000				
Dependent	PMO	0.490	0.036	0.000				Dependent	PMO	0.672	0.053	0.000				
Variables: BE								Variables:								
								Sat								
Model 2								Model 9								
R <sup>2</sup> =0.245	Constant	1.979	0.104	0.000				R <sup>2</sup> = 0.239	Constant	1.847	0.163	0.000				
Dependent	CPO	0.452	0.031	0.000				Dependent	CPO	0.527	0.049	0.000				
Variables:								Variables:								
BE								Sat								
Model 3								Model 10								
R <sup>2</sup> =0.289	Constant	2.062	0.114	0.000				R <sup>2</sup> = 0.227	Constant	1.809	0.171	0.000				
Dependent	LTO	0.371	0.030	0.000				Dependent	LTO	0.473	0.046	0.000				
Variables:								Variables:								
BE								Sat								
Model 4								Model 11								
R <sup>2</sup> =0.311	Constant	0.2.106	0.106	0.000				R <sup>2</sup> = 0.236	Constant	1.893	0.160	0.000				
Dependent	CO	0.391	0.030	0.000				Dependent	CO	0.487	0.046	0.000				
Variables: BE								Variables:								
								Sat								
Model 5								Model 12								
R <sup>2</sup> = 0.170	Constant	2.365	0.121	0.000				R <sup>2</sup> = 0.195	Constant	1.950	0.172	0.000				
Dependent	APO	0.282	0.033	0.000				Dependent	APO	0.434	0.046	0.000				
Variables: BE								Variables:								
								Sat								
Model 6								Model 13								
R <sup>2</sup> = 0.194	Constant	2.485	0.115	0.000				R <sup>2</sup> = 0.194	Constant	2.070	0.161	0.000				
Dependent	AdPO	0.262	0.032	0.000				Dependent	AdPO	0.424	0.045	0.000				
Variables: BE								Variables:								
								Sat								
Model 7								Model 14								
R <sup>2</sup> = 0.236	Constant	2.498	0.118	0.000				R <sup>2</sup> = 0.195	Constant	1.893	0.165	0.000				
Dependent	CFO	0.265	0.034	0.000				Dependent	CFO	0.487	0.048	0.000				
Variables: BE								Variables:								
								Sat								
								Model 15								
								R <sup>2</sup> =0.245	Constant	2.131	0.120	0.000				
								Dependent	Sat	0.344	0.032	0.000				
								Variables:								
								BE								

Statistical significance of the non-zerosness of the mediating effect of mediation variables on the specified relationships was tested by means of Sobel test (1982). Test results confirmed the results of mediation analysis. Thus;

- Satisfaction is a mediator in the relationship between PMO and PBE (z=8.554 and p<.01).
- Satisfaction is a mediator in relationships between the dimensions of PMO and PBE (perceived customer/performance orientation z=7.791 p<.01, perceived long-term orientation z=7.715 p<.01, perceived competitive

orientation  $z=7.275$   $p<.01$ , perceived academic personnel orientation  $z=7.432$   $p<.01$ , perceived administrative personnel orientation  $z=6.908$   $p<.01$  and perceived cross-functional coordination orientation  $z=6.966$   $p<.01$ ).

### Discussion and Conclusion

In this study, impacts of PMO and its dimensions on satisfaction and PBE in HE were analyzed on the basis of students who are accepted as the main customer. Also, it was attempted to explain whether the satisfaction is a mediator to account for why and how the impact of PMO and its dimensions occurs on the PBE. In keeping with the literature, this study revealed that PMO (Casidy, 2014; Voon, 2006) and its dimensions (Voon, 2007) influences the satisfaction. These findings mean that the more students perceive their universities as a market-oriented one, the more they satisfy. MO is based on meeting the demands and needs of customers and satisfying them for a long period of time and considering the competitors, offering value better than them and thus becoming different while doing so, and ensuring that all personnel serves to the purpose of satisfying the customer within a harmony. That is to say the customers and more specifically, satisfaction of their demands and needs constitute the center of this concept. In this context, PMO and its dimensions are generally expected to influence the customer satisfaction. It is required that all MO efforts are perceived by the customer; in other words, the customers should also understand/perceive that the relevant organization adopts a market-oriented approach towards the customers. The increase in this perception will give rise to and increase the satisfaction.

Table 4. Results of Mediation Analysis

Hyp.	1. step	2. step	3. step	4. step	Results
H6	PMO-Sat	Sat-BE	PMO- BE	PMO, Sat- BE	Accepted
	$\beta:0.672$ $p:0.000$ $R^2:0.306$ $Se:0.053$	$\beta: 0.344$ $p: 0.000$ $R^2: 0.245$ $Se: 0.032.$	$\beta:0.490$ $p:0.000$ $R^2:0.333$ $Se:0.036$	PMO $\beta:0.371$ $p:0.000$ $Se:0.042$ Sat $\beta:0.177$ $p:0.000$ $Se:0.035$ $R^2:0.378$	
H7	CPO- Sat		CPO-BE	CPO,Sat-BE	Accepted
	$\beta:0,527$ $p:0.000$ $R^2:0.239$ $Se:0.049$		$\beta:0.452$ $p:0.000$ $R^2:0.364$ $Se:0.031$	CPO $\beta:0.356$ $p:0.000$ $Se:0.034$ Sat $\beta:0.183$ $p:0.000$ $Se:0.032$ $R^2:0.417$	

H7	<b>LTO-Sat</b>	$\beta: 0.344$ $p: 0.000$ $R^2: 0.245$ $Se: 0.032.$	<b>LTO-BE</b>	<b>LTO, Sat- BE</b>	Accepted
	$\beta:0.473$ $p:0.000$ $R^2:0.227$ $Se:0.046$		$\beta:0.371$ $p:0.000$ $R^2:0.289$ $Se:0.030$	LTO $\beta:0.269$ $p:0.000$ $Se:0.033$ Sat $\beta:0.215$ $p:0.000$ $Se:0.033$ $R^2:0.363$	
H7	<b>CO- Sat</b>		<b>CO- BE</b>	<b>CO, Sat -BE</b>	
	$\beta:0.487$ $p:0.000$ $R^2:0.236$ $Se:0.046$		$\beta:0.391$ $p:0.000$ $R^2:0.311$ $Se:0.030$	CO $\beta:0.291$ $p:0.000$ $Se:0.033$ Sat $\beta:0.205$ $p:0.000$ $Se:0.033$ $R^2:0.377$	
H7	<b>APO- Sat</b>		<b>APO- BE</b>	<b>APO, Sat- BE</b>	
	$\beta:0.434$ $p:0.000$ $R^2:0.195$ $Se:0.046$	$\beta:0.282$ $p:0.000$ $R^2:0.170$ $Se:0.033$	APO $\beta:0.165$ $p:0.000$ $Se:0.034$ Sat $\beta:0.270$ $p:0.000$ $Se:0.034$ $R^2:0.292$		
H7	<b>AdPO- Sat</b>	<b>AdPO- BE</b>	<b>AdPO, Sat- BE</b>		
	$\beta:0.424$ $p:0.000$ $R^2:0.194$ $Se:0.045$	$\beta:0.262$ $p:0.000$ $R^2:0.154$ $Se:0.032$	AdPO $\beta:0.144$ $p:0.000$ $Se:0.033$ Sat $\beta:0.278$ $p:0.000$ $Se:0.034$ $R^2:0.283$		
H7	<b>CFO- Sat</b>	<b>CFO- BE</b>	<b>CFO, Sat- BE</b>		
	$\beta:0.449$ $p: 0.000$ $R^2: 0.195$ $Se: 0.048$	$\beta:0.265$ $p: 0.000$ $R^2: 0.140$ $Se: 0.034$	CFO $\beta: 0.137$ $p: 0.000$ $Se: 0.035$ Sat $\beta: 0.285$ $p: 0.000$ $Se: 0.035$ $R^2: 0.276$		

The fact that all dimensions of PMO influenced the satisfaction positively, which was one of the significant findings of this study, indicates that such dimensions must be overemphasized separately in increasing the student satisfaction. Considering that the customers are the center of MO, MO activities are based on offering superior values by showing superior performance and thus satisfying the customer. Each activity which is based on identifying and meeting the demands and needs of students as customer will lead to satisfaction. Therefore, as students will have the perception of customer/performance orientation as a result of MO efforts, this will positively influence their satisfaction. Both academic and administrative personnel of universities have important tasks in meeting the demands and needs of students. Students will satisfy if their expectations are met in a coordinated way by the personnel as well departments. Again, when students perceive the efforts to offer superior values with a competitor oriented approach, they will feel satisfied. Long-term orientation requires taking into consideration not only study years of students at the university, but also their lives after the graduation. Accordingly, all kinds of efforts which are based on offering today and after the graduation the elements that will support the careers of students throughout their lives will lead to satisfaction by strengthening their perception of benefit.

Another important finding of the study is that the satisfaction influenced the PBE positively. Although there is no research which examines these variables in HE, it is observed that this finding is consistent with the general marketing literature (Pappu & Quester, 2006; Chen, 2010; Torres & Tribo, 2011). Based on this finding, it can be suggested that students will perceive a higher level of BE if they are satisfied with their university in HE. An increase in satisfaction will increase the PBE as well. In other words, a student's attachment, association and perception of quality related to the university may increase with the influence of satisfaction, and may decrease if the student is not satisfied.

One of the main contributions of the study to the literature and practice is the finding that PBE is positively influenced by the PMO and its dimensions. Although there is no research which examines these concepts together, it may be believed that this finding is very important considering that branding will create a strong competitive advantage. Thus, when the students perceive market-oriented approaches of universities, this will strengthen the elements of BE, such as perception of quality, attachment and association regarding the university. In other words, an increase in PMO will also increase the PBE.

Another expected main contribution of the study is that it accounts for why and how the relationship among the variables takes place by using the mediation, while examining the relationship between PMO and PBE. According to the findings of the study, it is determined that satisfaction is the mediating variable in

the relationships between the PMO and its dimensions and PBE. Therefore, it is understood that positively PMO leads to satisfaction in students, and satisfaction results in PBE. This causal cycle may be considered as an indicator that the satisfaction, the mediating variable, should not be ignored in order to properly examine the relationships between the PMO and BE in HE.

Accordingly, the study findings offer important clues for universities which are in the process of MO and branding. In order to increase the BE, which plays an important role in creating a strong brand, one should know the factors that influence the BE perceived by students (customers). In the light of the findings, it is revealed that an adaption of a market-oriented approach is required in the branding process. A market-oriented approach will also lead to MO perceived by students, which will result in satisfaction. Accordingly, it may be expected that satisfied students will have high level of PBE. This study also revealed how significant the student satisfaction is. The fact that it directly influences PBE and its mediating role indicates the requirement to satisfy the students. However, to achieve all of these, it is required to make sure the students have adequate perceptions. To that end, it is recommended to effectively use the stimulants (such as graduate associations, career offices, guidance of advisor etc.) which will encourage MO and BE perceptions.

Although it is believed that important findings have been attained in relation to PMO and PBE, this study has some constraints. The sampling method and sample volume utilized in the study cover the students of one university only, and this prevents generalization of study findings. In this study, MO and BE were measured based on the perception of students. In addition to students, also market, community, decision-makers and academic management, are suggested as major challenges for HE and must be taken into account for competitive advantage (Hintea, 2013). Therefore, in future studies, examination of the perceptions of academic and administrative personnel as internal customers and other customers, such as candidate university students, the perception of private sector as well as social perception in terms of MO and BE would offer an insight into marketing strategies that may be applied in the HE. Also, it is determined in the study that satisfaction has a partial mediation variable role in the relationship between PMO and its dimensions and PBE. Thus, there exists other variables which may mediate the said relationships, it will be useful both for the literature and practice to identify in future studies any other variables which may mediate the said relationships.



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